

CLAIMS

1. Lip makeup composition comprising at least one cosmetically acceptable organic liquid medium
5 and at least one styrene-free film-forming linear block ethylenic polymer, the said polymer being such that, when it is present in sufficient amount in the composition, the said composition is capable of forming a deposit that has a resistive index of greater than or
10 equal to 80%.

2. Lip makeup composition comprising at least one cosmetically acceptable organic liquid medium and at least one non-elastomeric film-forming linear block ethylenic polymer, the said polymer being such
15 that, when it is present in sufficient amount in the composition, the said composition is capable of forming a deposit that has a resistive index of greater than or equal to 80%.

3. Composition according to Claim 1 or 2,
20 characterized in that it is capable of forming a deposit that has a resistive index of greater than or equal to 85%, preferably less than or equal to 90%, preferably greater than or equal to 95%.

4. Composition according to one of the
25 preceding claims, characterized in that the block polymer is not soluble at an active material content of at least 1% by weight in water or in a mixture of water and of linear or branched lower monoalcohols containing

from 2 to 5 carbon atoms, without pH modification, at room temperature (25°C).

5. Composition according to any one of the preceding claims, characterized in that the block
5 polymer comprises at least one first block and at least one second block that have different glass transition temperatures (T_g), the said first and second blocks being connected together via an intermediate block comprising at least one constituent monomer of the
10 first block and at least one constituent monomer of the second block.

6. Composition according to the preceding claim, characterized in that the first and second blocks are such that the difference between the glass
15 transition temperatures (T_g) of the first and second blocks is greater than 10°C, preferably greater than 20°C, preferentially greater than 30°C and more preferentially greater than 40°C.

7. Composition according to Claim 5 or 6,
20 characterized in that the intermediate block has a glass transition temperature that is between the glass transition temperatures of the first and second blocks.

8. Composition according to any one of Claims 5 to 7, characterized in that the first and
25 second blocks of the said block polymer are mutually incompatible.

9. Composition according to one of Claims 5 to 8, characterized in that the block polymer has a

polydispersity index of greater than 2, preferably greater than or equal to 2.5, preferably greater than or equal to 2.8 and preferably between 2.8 and 6.

10. Composition according to any one of
5 Claims 5 to 9, characterized in that the first block of the block polymer is chosen from:

- a) a block with a Tg of greater than or equal to 40°C,
- b) a block with a Tg of less than or equal to 20°C,
- c) a block with a Tg of between 20 and 40°C, and

10 the second block is chosen from a category a), b) or c) different from the first block.

11. Composition according to any one of
Claims 5 to 10, characterized in that the block polymer comprises at least one first block with a glass
15 transition temperature (Tg) of greater than or equal to 40°C and at least one second block with a glass transition temperature of less than or equal to 20°C.

12. Composition according to the preceding claim, characterized in that the proportion of the
20 first block ranges from 20% to 90%, better still from 30% to 80% and even better still from 50% to 70% by weight of the polymer.

13. Composition according to Claim 11 or 12, characterized in that the proportion of the second
25 block with a Tg of less than or equal to 20°C ranges from 5% to 75%, better still from 15% to 50% and even better still from 25% to 45% by weight of the polymer.

14. Composition according to Claims 5 to 10,

characterized in that the block polymer comprises at least one first block with a glass transition temperature (T_g) of between 20 and 40°C and at least one second block with a glass transition temperature of less than or equal to 20°C or a glass transition temperature of greater than or equal to 40°C.

15 15. Composition according to the preceding claim, characterized in that the proportion of the first block with a T_g of between 20 and 40°C ranges from 10% to 85%, better still from 30% to 80% and even better still from 50% to 70% by weight of the polymer.

16. Composition according to Claim 14 or 15, characterized in that the second block has a T_g of greater than or equal to 40°C.

15 17. Composition according to any one of Claims 14 to 16, characterized in that the proportion of the second block with a T_g of greater than or equal to 40°C ranges from 10% to 85%, preferably from 20% to 70% and better still from 30% to 70% by weight of the polymer.

18. Composition according to Claim 14 or 15, characterized in that the second block has a T_g of less than or equal to 20°C.

25 19. Composition according to one of Claims 10 to 12 and 18, characterized in that the proportion of the block with a glass transition temperature of less than or equal to 20°C ranges from 20% to 90%, better still from 30% to 80% and even better still from

50% to 70% by weight of the polymer.

20. Composition according to any one of Claims 10 to 19, characterized in that the block with a Tg of greater than or equal to 40°C is totally or
5 partially derived from one or more monomers whose homopolymer has a glass transition temperature of greater than or equal to 40°C, especially a Tg ranging from 40 to 150°C, preferably greater than or equal to 50°C, especially ranging from 50°C to 120°C and
10 preferentially greater than or equal to 60°C, especially ranging from 60°C to 120°C.

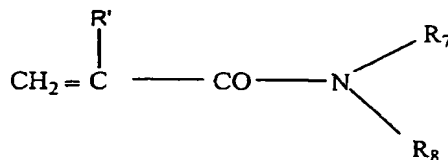
21. Composition according to the preceding claim, characterized in that the block with a Tg of greater than or equal to 40°C is a copolymer derived
15 from monomers whose homopolymer has a glass transition temperature of greater than or equal to 40°C.

22. Composition according to either of Claims 20 and 21, characterized in that the monomers whose homopolymer has a glass transition temperature of
20 greater than or equal to 40°C are chosen from the following monomers:

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3) - \text{COOR}_1$
in which R_1 represents a linear or branched unsubstituted alkyl group containing from 1 to 4 carbon
25 atoms, such as a methyl, ethyl, propyl or isobutyl group or R_1 represents a C_4 to C_{12} cycloalkyl group,
- acrylates of formula $\text{CH}_2 = \text{CH} - \text{COOR}_2$
in which R_2 represents a C_4 to C_{12} cycloalkyl group such

as isobornyl acrylate or a tert-butyl group,

- (meth)acrylamides of formula:



in which R₇ and R₈, which may be identical or different,
 5 each represent a hydrogen atom or a linear or branched
 alkyl group of 1 to 12 carbon atoms, such as an
 n-butyl, t-butyl, isopropyl, isohexyl, isooctyl or
 isononyl group; or R₇ represents H and R₈ represents a
 1,1-dimethyl-3-oxobutyl group, and R' denotes H or
 10 methyl,
 - and mixtures thereof.

23. Composition according to any one of
 Claims 20 to 22, characterized in that the monomers
 whose homopolymer has a glass transition temperature of
 15 greater than or equal to 40°C are chosen from methyl
 methacrylate, isobutyl methacrylate and isobornyl
 (meth)acrylate, and mixtures thereof.

24. Composition according to any one of
 Claims 10 to 20, 22 and 23, characterized in that the
 20 block with a Tg of greater than or equal to 40°C is a
 homopolymer.

25. Composition according to any one of
 Claims 10 to 14, 18 and 19, characterized in that the
 block with a Tg of less than or equal to 20°C is
 25 totally or partially derived from one or more monomers

whose homopolymer has a glass transition temperature of less than or equal to 20°C, especially ranging from -100 to 20°C, preferably less than or equal to 15°C, especially ranging from -80°C to 15°C and
 5 preferentially less than or equal to 10°C, especially ranging from -50°C to 0°C.

26. Composition according to the preceding claim, characterized in that the monomers whose homopolymer has a glass transition temperature of less
 10 than or equal to 20°C are chosen from the following monomers:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,
 R_3 representing a linear or branched C_1 to C_{12} unsubstituted alkyl group, with the exception of the
 15 tert-butyl group, in which one or more hetero atoms chosen from O, N and S is (are) optionally intercalated;
- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,
 R_4 representing a linear or branched C_6 to C_{12}
 20 unsubstituted alkyl group, in which one or more hetero atoms chosen from O, N and S is (are) optionally intercalated;
- vinyl esters of formula $\text{R}_5\text{-CO-O-CH} = \text{CH}_2$
 in which R_5 represents a linear or branched C_4 to C_{12}
 25 alkyl group,
- C_4 to C_{12} alkyl vinyl ethers, such as methyl vinyl ether and ethyl vinyl ether;
- N-(C_4 to C_{12})alkyl acrylamides, such as N-octylacryl-

amide,

and mixtures thereof.

27. Composition according to Claim 25 or 26, characterized in that the monomers whose homopolymer
5 has a glass transition temperature of less than or equal to 20°C are chosen from alkyl acrylates whose alkyl chain contains from 1 to 10 carbon atoms, with the exception of the tert-butyl group.

28. Composition according to any one of
10 Claims 10 to 15 and 19 to 27, characterized in that the block with a glass transition temperature of less than or equal to 20°C is a homopolymer.

29. Composition according to any one of
Claims 10 and 14 to 28, characterized in that the block
15 with a Tg of between 20 and 40°C is totally or partially derived from one or more monomers whose homopolymer has a glass transition temperature of between 20 and 40°C.

30. Composition according to any one of
20 Claims 10 and 14 to 29, characterized in that the block with a Tg of between 20 and 40°C is a homopolymer of a monomer chosen from n-butyl methacrylate, cyclodecyl acrylate, neopentyl acrylate and isodecylacrylamide.

31. Composition according to any one of
25 Claims 10 and 14 to 29, characterized in that the block with a Tg of between 20 and 40°C is a copolymer totally or partially derived from:
- monomers whose homopolymer has a Tg of greater than

or equal to 40°C, especially a Tg ranging from 40°C to 150°C, preferably greater than or equal to 50°C, especially ranging from 50 to 120°C, and preferentially greater than or equal to 60°C, especially ranging from
5 60°C to 120°C,

- and monomers whose homopolymer has a Tg of less than or equal to 20°C, especially ranging from -100 to 20°C, preferably less than or equal to 15°C, especially ranging from -80°C to 15°C, and preferentially less
10 than or equal to 10°C, for example ranging from -50°C to 0°C.

32. Composition according to any one of Claims 10, 14 to 29 and 31, characterized in that the block with a Tg of between 20 and 40°C is totally or
15 partially derived from monomers chosen from methyl methacrylate, isobornyl (meth)acrylate, trifluoroethyl methacrylate, butyl acrylate and 2-ethylhexyl acrylate, and mixtures thereof.

33. Composition according to any one of
20 Claims 10 to 23, 25 to 27, 29, 31 and 32, characterized in that the first block and/or the second block comprise(s) at least one additional monomer.

34. Composition according to the preceding claim, characterized in that the additional monomer is
25 chosen from hydrophilic monomers, monomers containing ethylenic unsaturation comprising one or more silicon atoms, and mixtures thereof.

35. Composition according to Claim 33 or 34,

characterized in that the additional monomer is chosen from:

- ethylenically unsaturated monomers comprising at least one carboxylic or sulfonic acid function,
- 5 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_6$
in which R_6 represents a linear or branched alkyl group containing from 1 to 4 carbon atoms, the said alkyl group being substituted with one or more substituents chosen from hydroxyl groups and halogen atoms,
- 10 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_9$,
 R_9 representing a linear or branched C_6 to C_{12} alkyl group in which one or more hetero atoms chosen from O, N and S is (are) optionally intercalated, the said alkyl group being substituted with one or more
- 15 substituents chosen from hydroxyl groups and halogen atoms;
- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_{10}$,
 R_{10} representing a linear or branched C_1 to C_{12} alkyl group substituted with one or more substituents chosen
- 20 from hydroxyl groups and halogen atoms, or R_{10} represents a C_1 to C_{12} alkyl-O-POE (polyoxyethylene) with repetition of the oxyethylene unit 5 to 30 times, or R_{10} represents a polyoxyethylenated group comprising from 5 to 30 ethylene oxide units;
- 25 - ethylenically unsaturated monomers comprising at least one tertiary amine function,
and mixtures thereof.

36. Composition according to any one of

Claims 33 to 35, characterized in that the additional monomer(s) is (are) chosen from acrylic acid, methacrylic acid and trifluoroethyl methacrylate, and mixtures thereof.

5 37. Composition according to one of Claims 33 to 36, characterized in that the additional monomer(s) represent(s) from 1% to 30% by weight, relative to the total weight of the first and/or second blocks.

10 38. Composition according to one of Claims 10 to 37, characterized in that each of the first and second blocks comprises at least one monomer chosen from (meth)acrylic acid esters, and optionally at least one monomer chosen from (meth)acrylic acid, and
15 mixtures thereof.

 39. Composition according to one of Claims 10 to 38, characterized in that each of the first and second blocks is totally derived from at least one monomer chosen from (meth)acrylic acid esters, and
20 optionally from at least one monomer chosen from (meth)acrylic acid, and mixtures thereof.

 40. Composition according to any one of Claims 2 to 39, characterized in that the block polymer is styrene-free.

25 41. Composition according to one of the preceding claims, characterized in that the block polymer has a weight-average mass (Mw) of less than or equal to 300 000, preferably ranging from 35 000 to

200 000 and better still ranging from 45 000 to 150 000.

42. Composition according to one of the preceding claims, characterized in that the block
5 polymer has a number-average mass (M_n) of less than or equal to 70 000, preferably ranging from 10 000 to 60 000 and better still ranging from 12 000 to 50 000.

43. Composition according to one of Claims 1 and 3 to 42, characterized in that the block polymer is
10 not an elastomer.

44. Composition according to any one of the preceding claims, characterized in that the block polymer is present in a content ranging from 0.1% to 60% by weight, preferably ranging from 0.5% to 50% by
15 weight and more preferably ranging from 1% to 40% by weight, relative to the total weight of the composition.

45. Composition according to any one of the preceding claims, characterized in that it comprises a
20 volatile oil.

46. Composition according to any one of the preceding claims, characterized in that it comprises a volatile oil chosen from octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexa-
25 siloxane, heptamethylhexyltrisiloxane, heptamethyloctyltrisiloxane, octamethyltrisiloxane, decamethyltetrasiloxane, isododecane, isodecane and isohexadecane.

47. Composition according to Claim 45 or 46, characterized in that the volatile oil is present in a content ranging from 1% to 70% by weight, preferably ranging from 5% to 50% by weight and preferentially ranging from 10% to 35% by weight, relative to the total weight of the composition.

48. Composition according to any one of the preceding claims, characterized in that it comprises a non-volatile oil.

10 49. Composition according to the preceding claim, characterized in that the non-volatile oil is chosen from hydrocarbon-based non-volatile oils and silicone non-volatile oils.

50. Composition according to Claim 48 or 49, characterized in that the non-volatile oil is present in a content ranging from 1% to 80% by weight, preferably ranging from 5% to 60% by weight, preferentially ranging from 10% to 50% by weight and especially ranging from 20% to 50% by weight, relative to the total weight of the composition.

51. Composition according to any one of the preceding claims, characterized in that it comprises at least one fatty substance that is solid at room temperature, chosen from waxes, pasty fatty substances and gums, and mixtures thereof.

52. Composition according to any one of the preceding claims, characterized in that it contains from 0.1% to 50% by weight and preferably from 1% to

30% by weight of waxes, relative to the total weight of the composition.

53. Composition according to any one of the preceding claims, characterized in that it comprises a
5 dyestuff.

54. Composition according to any one of the preceding claims, characterized in that it comprises a cosmetic ingredient chosen from additional film-forming polymers, vitamins, thickeners, trace elements,
10 softeners, sequestering agents, fragrances, acidifying or basifying agents, preserving agents, sunscreens, surfactants and antioxidants, or mixtures thereof.

55. Cosmetic composition according to any one of the preceding claims, characterized in that it
15 is in the form of a paste or a stick.

56. Cosmetic composition according to any one of the preceding claims, characterized in that it is in anhydrous form.

57. Cosmetic assembly comprising:
20 a) a container delimiting at least one compartment, the said container being closed by a closing member; and
b) a composition placed inside the said compartment, the composition being in accordance with any one of the preceding claims.

25 58. Cosmetic assembly according to Claim 57, characterized in that the container is at least partially formed from at least one thermoplastic material.

59. Cosmetic assembly according to Claim 57, characterized in that the container is at least partially formed from at least one non-thermoplastic material, especially glass or metal.

5 60. Assembly according to any one of Claims 57 to 59, characterized in that, in the closed position of the container, the closing member is screwed onto the container.

 61. Assembly according to any one of Claims
10 57 to 60, characterized in that, in the closed position of the container, the closing member is coupled to the container other than by screwing, especially by click-fastening, bonding or welding.

 62. Cosmetic process for making up the lips,
15 comprising the application to the lips of a composition according to any one of Claims 1 to 56.

 63. Use of a composition according to any one of Claims 1 to 56, to obtain a deposit of makeup on the lips that has good resistance, in particular good
20 resistance after coming into contact with water or with a dietary oil.

 64. Use of a styrene-free and/or non-elastomeric film-forming linear block ethylenic polymer in a composition for making up the lips, comprising a
25 cosmetically acceptable organic liquid medium, the said polymer being such that, when it is present in sufficient amount in the composition, the said composition is capable of forming a deposit that has a

resistive index of greater than or equal to 80%,
to obtain a makeup result on the lips that has good
resistance, in particular good resistance after coming
into contact with water or with a dietary oil.